First Destination Transportation & Packaging Initiative

FDTPI Final Report

Task Orders 0025 and 0033



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| The First Destination Transportation and Packaging Initiative (FDTPI) is a transformational logistics R&D program to reduce the acquisition cost of goods purchased by DLA by 1) First Destination Transportation (FDT) converting inbound freight for new procurement goods from Free On Board (FOB) Destination (supplier purchased and controlled transportation) to FOB Origin (government purchased and controlled transportation) terms; and 2) First Destination Packaging (FDP) simplifying packaging requirements for eligible stock material to the commercial American Society for Testing and Materials (ASTM) 3951 packaging standard. The FDTPI Final Report for Task Orders 0025 and 0033 briefly describes the FDTPI project, provides a summary of the work performed under these task orders, and includes recommendations for the path forward. | | | | | | | |
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1 Introduction

1.1 Purpose

This is the final report for Task Orders 0025, First Destination Transportation and Packaging Initiative (FDTPI) Phase II, and 0033, FDTPI Data Support, for contract SP4703-10-D-0002. This document will provide a brief description of the work performed under those task orders for FDTPI and an outlook for the initiative along with recommendations.

1.2 Background

FDTPI began as a J34 Strategic Distribution and Disposition (SDD) Research and Development (R&D) project which was initiated in October 2010 based on a concept submitted by DLA Land and Maritime Acquisition Executive for Contracting and Acquisition Management, Mr. Milton Lewis. FDTPI consists of two major components:

First Destination Transportation (FDT) – The FDT program will reduce the cost of goods purchased by converting inbound freight for new procurement goods from Free On Board (FOB) Destination (supplier purchased and controlled transportation) to FOB Origin (government purchased and controlled transportation) terms. FDT will initially utilize USTRANSCOM's existing Defense Transportation Coordination Initiative (DTCI) contract and DLA Distribution's Supply Chain Transportation (SCT) team to provide the inbound transportation. The freight rates available through DTCI and the SCT team are in most cases lower rates than suppliers typically have available for their use.

First Destination Packaging (FDP) – The FDP program will reduce acquisition costs by simplifying packaging requirements for eligible stock material to the commercial American Society for Testing and Materials (ASTM) 3951 packaging standard. The commercial standard is more commonly used by many DLA suppliers for their non-military sales and should result in lower cost of goods. Direct Vendor Deliveries (DVDs) are currently shipped in commercial packaging.

Task Orders 0025 and 0033 were devised to support the FDTPI Project Management Office (PMO) and J34 SDD R&D Program Manager in the planning and execution of FDTPI Phase II. Task Order 0025 is the follow-on project to the FDTPI Phase I, Task Order 0007, and FDTPI – Bridge, Task Order 0018. Task Order 0033 was issued in August of 2012 to provide data analysis and analytical support to the FDTPI implementation.

The FDTPI supports the 2010-2017 DLA Strategic Plan to leverage industry capabilities (WSE-C), and realize process excellence by balancing efficiency and effectiveness (SE-B).

2 Summary of the FDTPI Program to Date

Phase I of the FDTPI project began in October 2010 with an Analysis of Alternatives and an initial Rough Order of Magnitude (ROM) Business Case Analysis (BCA) of the alternatives selected by DLA leadership. Phase I focused on determining whether further investigation was warranted and defining the requirements and way ahead for FDTPI trial(s).

In February 2012, FDTPI Phase II was approved. The <u>original concept</u> for Phase II of the FDTPI study was to plan, execute, analyze, and report on limited trials of the FDT and FDP proposals. The results of this project were to be shared with sponsors and stakeholders and were

intended to include a revised BCA <u>based on trial results</u> and a final report including lessons learned, data analysis, and recommendations for next steps. The findings of these initial trials were to result in one of three recommendations: 1) ending the program; 2) reconfiguring the approach for additional trials; or 3) a phased implementation only to the supplier/item segments supported by trial results. A project management office (PMO) led by DLA Land and Maritime was established to provide greater structure and oversight to the initiative.

During the early stages of Phase II, the scope was altered by DLA leadership from limited trials to implementation with the direction to start small and then scale rapidly. The change in scope was driven by the belief that trials are costly and simply delay the implementation of good ideas which will improve DLA's business. FDP was implemented in March of 2013. FDT was implemented in late October 2013. Both programs, while early in the implementation process as of the writing of this report, were deemed mature enough to move from an R&D environment to Operations.

3 Work Performed

3.1 The Work Performed as Called For In Task Order 0025:

- 3.1.1 Provided an updated detailed Project Management Plan.
- 3.1.2 Tracked FDTPI project initiatives and milestones, action items, suspense dates, and execution status for reporting to leadership.
- 3.1.3 Provided subject matter expertise and project management support to the government-designated project manager.
- 3.1.4 Written meeting and teleconference minutes, action items, and summaries. On a reoccurring basis, the FDTPI PMO held Core Working Group meetings, General Working Group Meetings, and Human Performance Working Group (aka Change Management) meetings on a weekly or bi-weekly basis. Numerous other ad hoc meetings and conferences were held by telecom or on location.
- 3.1.5 Reports of FDTPI major project milestones (in a format suitable for leadership, monthly report, or public release format).
- 3.1.6 Semi-Monthly reports (of significant actions, meetings, accomplishments, or upcoming events, together with funding status). Mid-month and end-of-month reports were provided in the format required by the Strategic Distribution and Disposition (SDD) R&D Program Manager.
- 3.1.7 Weekly Status Reports for submission to the R&D Program Manager. These reports were drafted by the Analytic Strategies LLC team and submitted to the SDD Deputy R&D Program Manager for his review and editing each week.
- 3.1.8 Updated the Concept of Operations (CONOPs) for each component: FDT and FDP. The CONOPs for each component experienced multiple major updates due to the constantly evolving nature of each program.
- 3.1.9 Updated the Functional Requirements documents developed during Phase I to outline the requirements for FDTPI implementation. In regards to the FDT initiative, this

- task evolved into separate Functional Requirements documents for the FDT program overall and for support from the Surface Deployment and Distribution Command's (SDDC) Defense Transportation Coordination Initiative (DTCI).
- 3.1.10 Updated the FDTPI Business Case Analysis (BCA) based on the changes in the FDTPI program and any additional information gathered since the draft was published during Phase I. There were two major revisions of the BCA during this task order. The first was completed in July 2012, the second was drafted and submitted to the FDTPI PMO in November 2013. The second revision included Time-Phased Savings Projections by supply chain.
- 3.1.11 Provided a Final Report (this report) summarizing the work done for the period of performance and making recommendations based on the results of the Phase II project.

3.2 The Work Performed as Called For In Task Order 0033:

- 3.2.1 Developed separate Implementation Assessment Plans (IAPs) for FDT and FDP including a detailed plan to capture data via SCRs, to create associated metrics, and to build reports necessary for communicating the performance and progress of the implementation against the appropriate Measures of Effectiveness (MOEs).
 - 3.2.1.1 Modified documents as the operational concept changed based on lessons learned or new approaches were introduced.
 - 3.2.1.2 Assisted with the development of data acquisition strategies and performed data extraction from existing sources and analyses with necessary permissions when applicable.
 - 3.2.1.3 Assisted with the development of data analysis strategies in support of operational decisions in the FDTPI implementation planning process.
- 3.2.2 Extracted, organized and reported pre-implementation baseline metrics in accordance with the IAPs and FDTPI MOEs.
- 3.2.3 Collected, analyzed and reported performance metrics during implementation in accordance with the IAPs and FDTPI MOEs.
- 3.2.4 Provided support as needed / directed by the PMO.
 - 3.2.4.1 Participated in meetings and teleconferences.
 - 3.2.4.2 Provided data analysis and subject matter expertise in the development of briefings and reports to project sponsors, stakeholders and DLA leadership.
 - 3.2.4.3 Provided other analytical support for the FDTPI PMO as requested.
- 3.2.5 Provided input to the FDTPI Final Report for Task Orders 0025 and 0033(this report) addressing performance against the IAP.

4. Recommendations / Way Ahead

4.1 Common FDTPI

The challenges of implementing the FDTPI program across the enterprise are substantial and cannot be overstated. Commercial implementation history demonstrates that this is not a program which can operate on "automatic pilot" but requires constant focus and managerial interaction and modification. FDTPI continues to require significant oversight as it continues to mature. Certain opportunities are common to both FDP and FDT programs as discussed below:

- 4.1.1 <u>Maintain a FDTPI Program Oversight Team</u> with an executive champion and constituted from transportation, packaging, and acquisition personnel including representatives from each participating Primary Level Field Activity. This team should provide active monitoring of the program's progress in achieving cost savings, recommend and socialize improvements needed in business processes and/or systems, and address issues and concerns as they arise. It is also recommended this team includes support from internal and external sources with expertise in commercial best practices.
- 4.1.2 <u>Build a feedback loop</u>. Real time feedback for management and, best case, down to the buyer / contract level on effectiveness of achieving expected savings is critical to maximizing the benefit to the government.
- 4.1.3 <u>Target underperforming vendors</u>. Based on commercial experiences, some suppliers will not cooperate with the program either by not providing a reasonable discount for the government assuming the first destination freight responsibilities / packaging risks or by refusing to participate at all. Such suppliers need to be identified and buyers engaged to achieve expected savings. This may require additional buyer training and/or resources.
 - Continual training and follow up with the Acquisition staff is recommended to ensure sufficient emphasis is placed on the FDTPI program in the acquisition process.
 - Individual buyer and vendor effectiveness metrics would be significant motivators and would facilitate oversight and troubleshooting.
- 4.1.4 <u>Target richest opportunities</u>. Once there is a sufficient history of transactions to evaluate, a focused effort should be made to identify and target the suppliers / type of shipments which provide the highest return while culling out from the program those acquisition transactions which actually cost the government money. Doing so will maximize program returns for both FDP and FDT.

One proposed alternative is having vendors provide two bids – with and without transportation costs. While currently systems do not support such an approach, this alternative combined with an accurate transportation cost estimate appears the most robust approach to maximizing savings.

- 4.1.5 <u>Expand eligible purchases</u>. There are categories of new procurement transactions for which obstacles must be overcome for inclusion in the program. Alternatives to explore include:
 - Expand to include select hazardous product contracts for FDT.
 - Convert LTCs with small business suppliers to the FDTPI program at the earliest opportunity. DLA should have the greatest leverage with small business suppliers and LTCs provide the best negotiating opportunity for FDTPI.
 - Move items currently purchased via spot buys to LTCs to the degree possible. Small individual spot buys provide little opportunity for negotiation on FDTPI. Moving these purchases to LTCs makes it more economical for DLA to expend resources on negotiating discounts.
 - Target suppliers that are frequent sources for spot buys and make direct contact to urge them to reduce their prices to DLA in accordance with the savings they incur from the FDTPI program.
- 4.1.6 Ensure buying platforms support goals. Manual buys are able to integrate transportation savings into the negotiation. Buys using limited negotiation (automated) buys validate a price based on an unadjusted historical benchmark. The systems need to be updated with price targets based on expected FDT improvement.
- 4.1.7 <u>Don't forget agility</u>. The environment will change. The FDT processes constructed must be capable of supporting today's cost-centric Defense environment but also must be able to quickly shift to a large scale expeditionary scenario and meet requirements in that environment. Planning now for such contingencies will enable the processes and systems to support logistical success rather than to hinder Warfighter support.

4.2 FDT

The FDT program in particular requires a vigorous continuous program improvement effort to maximize potential benefit. An aggressive and well-executed implementation of the FDT program focused on the right products and suppliers should provide DLA significant cost savings. A mature program that maximizes savings will require a longer period of time to develop and maximizing the program's potential return will be a long term process and require persistence and determined support from leadership.

From an operations perspective, FDT is challenging to implement and increasing the efficiency of freight management is crucial to maximizing savings. However, convincing suppliers to share the cost savings with DLA is the greatest challenge to the success of this program. The key for DLA Acquisition to realize those savings lies with identifying and taking advantage of negotiating opportunities and leverage. The following areas are identified as needing continued focus for the program to mature fully.

4.2.1 <u>Implement aggressive continuous improvement</u>. The FDT program entails significant changes to processes – both from a systems and operations perspective - which may take

considerable time to achieve the desired objectives. Initial systems and process changes may not turn out to be the most efficient methodology and in-process adjustments may be required. This is not a "fire and forget" improvement.

The team should continue to benchmark Canadian military and commercial entities engaging on similar initiatives to ensure "best practices" are incorporated into FDT.

- 4.2.2 Acquire transportation efficiently. In October 2014, the Surface Deployment and Distribution Command's (SDDC) DTC program is scheduled to expire (although there is discussion that it may be extended by as much as six months). SDDC intends to shift to the Global Freight Management (GFM) system augmented with the Automation of Transportation Requests (ATR) module to replace the DTC program. However, FDT business requirements have not been mapped against the proposed system leaving the potential for significant gaps. For example, consolidation is not one of the capabilities in the GFM/ATR system reducing FDT savings significantly. The FDT owner needs to engage soon to ensure that business process and information needs are met by the DTC successor. Approaches include:
 - Enable increased freight consolidation while maintaining an emphasis on refining and expanding the practice to include shipments from multiple suppliers. If SDDC's successor to the DTCI program doesn't provide a methodology for consolidation as currently planned, then DLA must consolidate shipments prior to the shipments being tendered to SDDC for transportation. This will require system changes.
 - Work with USTRANSCOM, DLA Distribution, and DLA Transportation to ensure the freight management methodology replacing the DTCI program meets the FDT program requirements and is cost-effective. If the DTCI successor costs DLA more than \$15 per freight transaction, DLA should study alternatives.

In summation, FDT's long term effectiveness is dependent on three factors that need to continue to be reinforced as the program transitions to the operational community:

- DLA finding a cost-effective post-DTCI vehicle for managing inbound freight that meshes with the envisioned business process to achieve business objectives.
- Continually improving the capability of the automated and manual contracting processes to optimize financial returns for DLA providing the first-destination transportation.
- Tuning DLA systems and processes to make consolidation of inbound shipments optimal notably for consolidation of first-destination shipments to capture savings across the widest possible acquisition population.

4.3 FDP

One of the positives of the FDP program is that FDP does not require additional operational process changes or additional expense - merely an increase in a buy's effort and, possibly, system changes to enhance the contracting process and better track results. The future focus for FDP should be on maximizing the packaging savings passed to the government by vendors. To get there, effort will focus on:

4.3.1 Refine / expand NIIN eligibility. Close scrutiny should be maintained over the eligibility of NIINs in the program. Optimizing FDP savings requires preventing "backsliding" on the part of participants; i.e., creatively decreasing the base of eligible NIINs. There will be packaging mishaps along the way and there may be a tendency to remove items from the program accordingly. Poor execution of contractual requirements (e.g., commercial packaging) by a supplier should not be cause to remove a NIIN from the FDP program. However, proven commercial packaging success is a reason to expand items covered.

Initial results from the FDP implementation indicate that it has not resulted in an increase in the frequency of Supply Discrepancy Reports (SDRs). This should continue to be closely monitored. Damage or deterioration of material in storage should also be monitored for items eligible for FDP which are in storage for periods of time in excess of one year. Continued success in this area should enable management to recommend expansion of FDP to currently a larger NIIN population.

In sum, FDP implementation has few unique issues and they are tied to expanding the viable pool of candidate NIINs and monitoring NIINs in the program to ensure that short or long term quality concerns are addressed.

Appendix 1. Assessment Planning and Implementation

1.1 Purpose

Task Order 0033 is focused on analytical support to the PMO with particular focus on assessing program performance.

1.2 Integrated Assessment Plan (IAP)

Due to changes in the Program direction, two IAPs were developed and coordinated. This enabled the unique characteristics of both FDP and FDT to be addressed in the most effective manner possible.

1.2.1 FDP IAP

- 1.2.1.1 The FDP IAP focused on evaluating the key Measure of Effectiveness (MOE): cost reduction. The IAP measured the reduction in supply costs from acquisition through shipment of item to customer. This required the baseline (total contracted) item cost to be evaluated against the item cost.
- 1.2.1.2 The FDP IAP leveraged a control group (NIINs that were not included in the implementation) to determine the relative price increase attributable to the FDP program.
- 1.2.1.3 Significant assumptions were laid out in the IAP. The most important were:
 - 1.2.1.3.1 There will be no additional costs to the acquisition community to implement this initiative.
 - 1.2.1.3.2 Items without a baseline price are assumed to achieve the same savings as those items with a baseline price.
 - 1.2.1.3.3 Exclude group NIINs will have a similar price impact from other Big Lever initiatives as the Include group.
 - 1.2.1.3.4 Given to large number of purchase orders and distribution of those price indices, use of t-test (statistical test) will yield reasonable results.
- 1.2.1.4 The impact of FDP was viewed at both global and PLFA grouping levels. Groupings were based on statistically similar performance.
- 1.2.1.5 Impact was also viewed for particular NIIN or customer groupings. The most effective were:
 - 1.2.1.5.1 Most Likely Population.
 - 1.2.1.5.2 Key Vendors.
 - 1.2.1.5.3 Competitive Purchase Orders.

1.2.2 FDT IAP

1.2.2.1 The FDT IAP focused on evaluating the key Measures of Effectiveness (MOEs): cost reduction and velocity.

- 1.2.2.1.1 The IAP measured the reduction in supply costs from acquisition through shipment of item to customer. This required the baseline (total contracted) item cost to be evaluated against the item cost. The primary format was item price change trends and the second format was total cost of item trends.
- 1.2.2.1.2 The IAP measured the effectiveness of government-managed transportation to provide acceptable delivery velocity from vendor receipt of the purchase order until delivery of the shipment.
- 1.2.2.2 Identifying dollar savings and velocity changes attributable to FDT is not an expectation for this phase of FDTPI. However, if a reasonable statistical primary baseline can be developed, an acquisition cost reduction estimate can be calculated.
- 1.2.2.3 Significant assumptions were laid out in the IAP. The most important were:
 - 1.2.2.3.1 Quality Costs are assumed to be absorbed under the transportation contract rather than passed to the government.
 - 1.2.2.3.2 If a statistically valid baseline can be developed, post-implementation environment will be assumed similar to the baseline environment. This means that no new Big Idea initiatives or other environmental changes will affect the MOE.
 - 1.2.2.3.3 Other Big Lever projects will not impact delivery times.
 - 1.2.2.3.4 Contract Delivery Dates (CDDs) reflect both the Acquisition and Customer experience end points (objectives) accurately.
 - 1.2.2.3.5 Any Award to CDD durations over 10 days are either data issues or performance outliers. They can be omitted from consideration.
- 1.2.2.4 The impact of FDT was viewed at both global and PLFA grouping levels. Groupings were based on statistically similar performance.
- 1.2.2.5 Impact was also viewed for particular NIIN or customer groupings. Groupings are still being evaluated.

1.3 Reporting

- 1.3.1 Monthly Performance reports have been published and distributed. Format is consistent with the MOEs identified in the Business Case Analysis and have been updated as needed.
- 1.3.2 FDP Reports show a statistically significant improvement in relative price performance between the "Included" population and the "Excluded" (control) population.
- 1.3.3 FDT Reports have not been available long enough to draw conclusions.